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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/172,362	10/14/1998	ANTHONY J. DEZONNO	96RSS017.075	9182
24628	7590	12/13/2005	EXAMINER	
WELSH & KATZ, LTD 120 S RIVERSIDE PLAZA 22ND FLOOR CHICAGO, IL 60606			DEANE JR, WILLIAM J	
			ART UNIT	PAPER NUMBER
			2642	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/172,362	Applicant(s) DEZONNO, ANTHONY J.	
	Examiner William J. Deane	Art Unit 2642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to applicant's RCE filed on 09/22/2005 after the Board decision of 0831/2005 in which the examiner was affirmed on all claims. Claims 1 - 24 (amended) are now pending in the present application along with new claims 25 - 32.

Claim Rejections - 35 USC # 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 2, 4 - 11, 13 - 20, and 22 - 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vilsoet et al. (U.S. Patent Number: 5,546,456) in view of Bigus et al. (U.S. Patent Number 5,155,763) and further in view of Donnelly (U.S. Patent Number 5,864,617) and further in view of Corduroy et al. (U.S. Patent Number: 5,978,465).

Regarding claims 1, 3, 10, 12, 19 and 21, Vilsoet et al. discloses a method of processing calls in an automatic call distributor (Fig. 1), such method comprising the steps of: learning a set of desired resource relationships for servicing a plurality of call processing load conditions in the automatic call distributor (column 4, lines 53 to 58)', and distributing resources of the automatic call distributor based upon call processor loading and the learned set of resource relationships (column 4, lines 32 to 52).

What Vilsoet et al. does not disclose a neural network. However, as admitted by Applicant and as seen in Bigus et al. (U.S. Patent Number 5,155,763) and Donnelly (U.S. Patent Number 5,864,617), neural networks are well known in the art as being used in telecommunications networks because they afford a platform that can learn,

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react, and provide more exact call routing/call feature execution. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the system and method taught by Vilsoet et al. implemented in a neural network setting in place of a conventional switching/data network because a neural network platform would have advantages over a conventional switched network such as the above-discussed learning aspect taught by Vilsoet et al.

Neither Vilsoet et al., Bigus et al., nor Donnelly disclose the method of processing calls wherein the step of distributing resources further comprises reassigning an agent of a first group to a second group. However, Corduroy et al. discloses the method of processing calls as in claim 1 wherein the step of distributing resources further comprises reassigning an agent of a first group to a second group (Fig. 2, 44 and 46). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Vilsoet et al. with the addition teaching of Corduroy et al. because it would provide a system for automatically allocating call center resources, without requiring intervention by a supervisor (column 2, lines 2 to 7).

With respect to determining operating parameters of the ACD, such is inherent.

Furthermore, if a system "learns" a set of desired relationships, then of course, training occurs as well. In order for a system to "learn" that system must monitor, analyze, absorb, and ultimately learn how to properly react to those certain aspects of the system that are to be "learned." This is in effect training.

Regarding claims 2, 11, and 20, Vilsoet et al. further discloses the method of

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processing calls wherein the step of distributing resources further comprises adjusting a ratio of inbound calls to outbound calls based upon the operating level of the automatic call distributor (column 5, lines 42 to 55).

Regarding claims 4, 13, and 22, Vilsoet et al. further discloses the method of processing calls wherein the step of learning the set of desired resource relationships further comprises determining a number of call that have been answered and are in a queue waiting to be assigned to an agent (column 5, lines 20 to 29).

Regarding claims 5, 14, and 23, Vilsoet et al. further discloses the method the method of processing calls wherein the step of learning the set of desired resource relationships further comprises determining a number of available agents (column 8, line 46).

Regarding claims 6, 15, and 24, Vilsoet et al. further discloses the method of processing calls wherein the step of learning the set of desired resource relationships further comprises determining an average call waiting time of a call in a call queue (column 7, lines 5 to 7).

Regarding claims 7, and 16, Vilsoet et al. further discloses the method of processing calls wherein the step of learning the set of desired resource relationships further comprises determining an average call waiting time of a call for each group of a plurality of agent groups of the automatic call distributor (claim 2).

Regarding claims 8, and 17, Vilsoet et al. further discloses the method of processing calls wherein the step of learning the set of desired resource relationships further comprises determining a number of calls in a call queue for each group of a

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plurality of agent groups of the automatic call distributor (claim 4).

Regarding claims 9, and 18, Vilsoet et al. further discloses the method of processing calls wherein the step of learning the set of desired resource relationships further comprises determining an average waiting time between call arrival at the automatic call distributor and call acceptance (column 7, lines 1 to 13, and column 8, lines 37 to 47).

With respect to claim 25, appears to be nothing more than duplicating what is already known in the art by supplying a neural network to each agent group. Such a limitation would have been obvious to one of ordinary skill in the art as merely duplicative of what is known in the art.

With respect to claims 26 - 27, setting a threshold would have been obvious to one of ordinary skill in the art.

With respect to claim 28 - 30, note the rejections above.

With respect to claims 31 and 32, including weights are notoriously old in the art and including weights wherever it was deemed necessary would have been obvious to one of ordinary skill in the art.

Response to Arguments


Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bill Deane whose telephone number is (571) 272-7484. In addition, facsimile transmissions should be directed to Bill Deane at facsimile number (571) 273-8300.

11Dec2005


WILLIAM J. DEANE, JR.
PRIMARY EXAMINER